



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D3391-023
Job Sheet 168761-A



Part No: D3391-023

Job Qty: 1 ea

Part Name: Mid Tube Assembly



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 11/22/17

Job Tracking No:

Due Date: 12/8/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Customer: Abu Dhabi Aviation (CABUD01)

PO Box 2723, Abu Dhabi International Airport Abu Dhabi, , 2723 United Arab Emirates ph:971 2 575 8000
fx:971 2 575 7775.

Note: DWG REV J SHEET 7 IPP A 05.10.20 New Issue KJ/EC IPP B IPP C 07.03.20 rev F dwg EC IPP D 07.03.28
re-format EC IPP E 07.10.31 ecn 1053P EC IPP Rev:F ECN 1056 07-11-13 DD verified by: EC IPP Rev:G 08-
09-08 new process (ecn 08-510) DD verified by:EC IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC
IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP Rev:J add in seq 140 expire date &b#
sikaflex DD 10.02.17 verified by:EC

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		12/7/17	0.00	0.00	Start Up Skidtubes		
100	Skidtubes	1 pcs		12/7/17	0.88	2.11	Skidtubes		AP 2017-12-18
110	QC	1 pcs		12/7/17	0.00	0.00	QC5		AP 17-12-19
120	HandFinish	1 pcs		12/7/17	0.00	0.38	HandFinish1		2017-12-17
130	QC	1 pcs		12/7/17	0.00	0.00	QC7		BE
140	Skidtubes	1 pcs		12/7/17	0.00	2.11	Skidtubes		BE
150	QC	1 pcs		12/7/17	0.00	0.00	QC5		BE
160	Skidtubes	1 pcs		12/7/17	0.00	2.11	Skidtubes		BE
170	QC	1 pcs		12/7/17	0.00	0.00	QC10		PD
180	QC	1 pcs		12/7/17	0.00	0.00	QC5		AP 18-1-11
185	HandFinish	1 pcs		12/7/17	0.00	0.38	HandFinish2		AP 18-1-12
191	SprayPaint	1 pcs		12/7/17	0.00	0.91	Spray Paint		
200	QC	1 pcs		12/7/17	0.00	0.00	QC14		AP 18-02-03
230	HandFinish	1 pcs		12/8/17	0.00	0.38	HandFinish4		AP 18-02-02
240	QC	1 pcs		12/8/17	0.00	0.00	QC5		AP 18-2-5
250	Packaging	1 pcs		12/8/17	0.00	0.00	Packaging3		AP 18-2-5
260	QC21-SA	1 Ea		12/8/17	0.00	0.00	QC21		21 FEB 05 2018

Part Op 100 - 1-Cut tube to finish length as per Dwg D3391 2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1
Descriptions: fwd saddle hole on one side only as per Dwg D3391 3-Open aft saddles and GHW holes to Ø0.4375" except for fwd saddle
holes 4-Remove .030" from Fwd indexing Ridge as per Dwg D3391 5-Remove indexing ridge on Fwd & Aft end of
skidtube as per Dwg D3391 6-Deburr, scribe batch # on aft end. 7- Locate D3391-021 in D3391-023 at 9.00" (see view
F-F) 8- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149
locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer
drilled pilot holes in D3391-023/-021 using drill press. ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to
0.500" as per ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". D3391-021
BATCH: 5016991 9- Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.375" holes with paint marker.
DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG Locating from two fwd wearplate holes in D3391-023
drill remaining 6 wearplate holes in D3391-021 using DT8937 10- Open wearplate holes of D3391-023 assembly detail
section G-G to Ø0.375" (10 holes) as per Dwg D3391 Open wearplate holes of D3391-023 assembly detail section H-H to

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: P. N Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, ON K6A 1K7 CANADA TEL.: 1 613 632-5200 Email: sales@dartaero.com www.dartaerospace.com		DISPOSITION Mfg Date: 12/14/17 Job No: 168761 - A		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">☐ Skid-tube</td> <td style="width: 15%;">☐ Cross tube</td> <td style="width: 15%;">☐ Water Jet</td> <td style="width: 15%;">☐ Engineering</td> </tr> <tr> <td>☐ Machining</td> <td>☐ Small Fab</td> <td>☐ Prod. Eng. Coord.</td> <td>☐ Quality</td> </tr> <tr> <td>☐ Thermoforming</td> <td>☐ Finishing</td> <td>☐ Rec/Store/Packaging</td> <td>☐ Other</td> </tr> <tr> <td>☐ Large Fab</td> <td>☐ Composite</td> <td>☐ Supplier</td> <td></td> </tr> </table>						☐ Skid-tube	☐ Cross tube	☐ Water Jet	☐ Engineering	☐ Machining	☐ Small Fab	☐ Prod. Eng. Coord.	☐ Quality	☐ Thermoforming	☐ Finishing	☐ Rec/Store/Packaging	☐ Other	☐ Large Fab	☐ Composite	☐ Supplier										
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Date : _____		QTY Effective : _____		MRB (QSI042) Approval 																														
Barcode: S022554 Mid Tube Assembly		D3391 - 023 Start up Operation		Disposition 																														
Envir Dc Equip/ Handl N Internal Tra Tribal Kno Subs Past Expiry Date Misidentified		PART NO: Revision: Operation: Change No:		Completed By 																														
FAULT CATEGORY <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">☐ Temperature/Cure</td> <td style="width: 33%;">☐ Power Loss/Surge</td> <td style="width: 33%;">☐ Positioned Wrong</td> </tr> <tr> <td>☐ Set-up</td> <td>☐ Folio/Program</td> <td>☐ Outside Dimensions</td> </tr> <tr> <td>☐ BOM/Route</td> <td>☐ Grain</td> <td>☐ Over/Under tolerance</td> </tr> <tr> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Part Incorrect</td> </tr> <tr> <td>☐ Inspection Incomplete/Unqualified</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Contamination</td> <td>☐ Out of Sequence</td> <td>☐ Part Moved</td> </tr> <tr> <td>☐ Countersink</td> <td>☐ Off-set</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Cut Too Short</td> <td>☐ Mislabeled</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Instructions Incomplete/Unclear</td> <td>☐ Fit/Function</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Drill Holes</td> <td>☐ Misaligned/off center</td> <td>☐ Turning Sequence</td> </tr> </table>		☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Contamination	☐ Out of Sequence	☐ Part Moved	☐ Countersink	☐ Off-set	☐ Drawing	☐ Cut Too Short	☐ Mislabeled	☐ Finish	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence	Lead hand / Supervisor Approval Verification 		
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Manufacturing Process Past Due		OTHER : _____		QC / QA Coordinator Approval 																														

Ø0.297" (20 holes) as per Dwg D3391 Deburr and blow out all chips from inside tube, scribe ^{AP}
 140 - 1-Open float bag holes as per dwg 2-C'sink float bag holes as per dwg 3- Prepare tube for welding 4-Bond web in
 place as per Dwg D3391 & QSI 015. Adhere for 12 hours) A/R Sikaflex exp: 2018-04-21 batch#: M138654
 NOTE: ENSURE WEB IS INSERTED IN AFT END OF TUBE
 160 - 1-Weld crossbolt spacer as per dwg D3391 & QSI 004 2-grind weld flush ^{RF} A/R M138673
 185 - Re-alodine
 191 - PRIME AS PER DWG AND QSI005 4.2.1.3.3 PRIMER BATCH: _____ PAINT AS PER DWG AND
 QSI005 4.2.2.4 PAINT: _____
 230 - 1-Install Inserts as per Dwg 

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	D2500-1-100 <u>F163253</u>	1	92	0	0
140-Skidtubes	D3389-1 <u>S018928</u>	1	8	0	0
160-Skidtubes	D3681-1 <u>S019147</u>	5	111	0	0
230-HandFinish	ALS4-1032-130 <u>5007274</u>	20	12,098	0	0
	D3591-1 <u>5026944</u>	2	85	0	0

Part Specifications

Specifications could not be found.

Plex 11/22/17 1:31 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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